

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**AIR QUALITY PERMIT
Issued under 401 KAR 52:040**

Permittee Name: Hanner Machine Company, Inc.

Mailing Address: 130 Pond Road
Madisonville, KY 42431

Source Name: Hanner Machine Company, Inc.
Mailing Address: 130 Pond Road
Madisonville, KY 42431

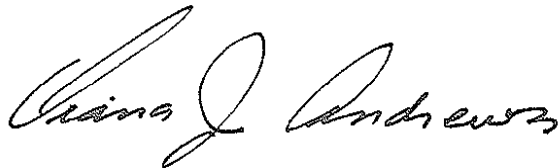
Source Location: 130 Pond Roa
Madisonville, KY 42431

Permit Number: S-05-197
Source A. I. #: 38533
Activity #:
Review Type: Operating
Source ID #: 21-107-00145

Regional Office: Owensboro Regional Office
3032 Alvey Park Drive W., suite 700
Owensboro, KY 42303-2191
(270) 687-7304

County: Hopkins

Application
Complete Date: January 06, 2006
Issuance Date: February 15, 2006
Revision Date:
Expiration Date: February 15, 2016



**John S. Lyons, Director
Division for Air Quality**

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Definitions: The following definitions apply to all abbreviations and variables used in this permit:

PT – total particulate matter
PM10 – particulate matter equal to or smaller than 10 micrometers
CO – carbon monoxide
NO_x – nitrogen oxides
SO₂ – sulfur dioxide
Pb – lead
VOC – volatile organic compounds
Cr – chromium

SECTION A – PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State - Origin Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01(01) Hard Chrome Electroplating Process

Description:

Wipe down, strip tank, rinse tank, hard chrome plating tank with Clinton Power S5012SOSF 242 Volt, 212 Amp model rectifier (for converting AC to DC), and final rinse tank.

Maximum continuous rating: 2000 lbs parts/hour

Control equipment: Composite Mesh Pad

Construction commenced: July 2000

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations

401 KAR 63:002, National Emission Standards for hazardous air pollutants

(40 CFR 63, subpart N – incorporated by reference)

1. Operating Limitations:

- a) Pursuant to 40 CFR 63.342(f)(3) the permittee shall prepare an operation and maintenance plan to be implemented on startup. (This plan is incorporated by reference into this permit).
- b) Pursuant to 63.342(f)(3)(i)(A, B, D, and E) the plan shall:
 - i. specify the operation and maintenance criteria for the affected source, the add-on air pollution control device, and the process and control system monitoring equipment and shall include a standardized checklist to document the operation and maintenance of this equipment;
 - ii. incorporate the work practice standards for the device and monitoring equipment as identified in 63.342 Table 1;
 - iii. specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and
 - iv. include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
- c) Pursuant to 63.342(f)(3)(ii) if the operating and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

monitoring equipment during similar malfunction events and a program for corrective action for such events.

- d) Pursuant to 63.342(f)(3)(iv) if actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operating and maintenance plan, the permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Division.
- e) Pursuant to 63.342(f)(3)(v & vi) the permittee shall keep the written operating and maintenance plan on record after it is developed to be made available for inspection, upon request, by the division for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous versions of the operating and maintenance plan on record to be made available for inspections, upon request, by the Division for a period of 5 years after each revision to the plan. The requirements for the plan may be met using applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements outlined below.

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:010 Section 3 (1) visible emissions shall not equal or exceed 20% opacity, as determined by Reference Method 9 of Appendix A to 40 CFR 60.
- b) Pursuant to KAR 59:010 Section 3 (2), hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 \cdot P^{0.62}$$

Where E = Particulate emissions (lb/hr) and

P = Process weight rate (tons/hr)

If P < 0.5 tons/hr, then E = 2.34 lb/hr

Compliance Demonstration:

- A) Once per week, the permittee shall survey stack 1 and maintain a log noting the following information:
 - i. Whether any air emissions were visible from the stack.
 - ii. Whether the visible emissions were normal for the stack.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

iii. If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the weekly log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

- B) To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amounts and types of raw materials processed. Particulate emissions from each emission point shall be calculated as follows:

$$PE_{hr} = \sum \frac{PW_i * EF_i * (100 - eff_i \%)}{100}$$

Where PE_{hr} = Particulate emissions (lb/hr)

PW_i = Maximum process weight rate for raw material (tons/hr), averaged over one month.

EF_i = KYEIS particulate emission factor for raw material i (lbs/ton)

$eff\%$ = Control efficiency for unit processing raw material i.

- c) Pursuant to 63.342(c)(1)(ii) the concentration of total chromium in the exhaust gas stream discharged to the atmosphere shall not exceed 1.3×10^{-5} gr/dscf.

Compliance Demonstration

- A) Compliance shall be demonstrated by maintaining operating parameters of control equipment established during the initial compliance demonstration.
B) The compliance provisions listed in 40 CFR 63.343 shall be followed.

3. Testing Requirements:

Testing to determine chromium emissions shall be done in accordance with test methods established in 63.344(c) and 63.343(b) and (c).

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the monthly hours of operation and the total monthly input of all raw materials. This information shall be used to calculate process weight rate in lb/hr.
- b) Pursuant to 63.343(c)(1)(ii) the permittee shall monitor once per day the pressure drop across the composite mesh pad. To be in compliance with the standards, the composite mesh pad system shall be operated within plus or minus 1 inch of water column of the pressure drop value established during the initial performance test.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

5. Specific Recordkeeping Requirements:

- a) Daily records shall be maintained of the total input of all raw materials and hours of operation.
- b) Weekly log for visible emissions shall be kept as required above. Also, see the Specific Monitoring Requirements above.
- c) Pursuant to 63.346(b) the following records shall be maintained for a period of 5 years:
 - i. Inspection and maintenance records for the composite mesh pad, the affected source and all associated monitoring equipment;
 - ii. The occurrence, duration, and cause of each malfunction of the process, composite mesh-pad, monitoring equipment, and actions taken;
 - iii. Actions taken during periods of malfunction when such actions are inconsistent with the operating and maintenance plan;
 - iv. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of operation and maintenance plan;
 - v. Test reports, which document the result of all performance tests;
 - vi. All measurements necessary to determine the operating conditions of performance test and monitoring data as required above;
 - vii. Monitoring data required by 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
 - viii. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emission, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
 - ix. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emission, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
 - x. The total process operating time of the affected source during the reporting period.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)**6. Specific Reporting Requirements:**

- a) All exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division of Air Quality within 30 days of the exceedance as specified in the Section F.8.
- b) Pursuant to 63.347 the permittee shall submit semi-annually an ongoing compliance status report. The report shall contain the following information:
 - i. Company name and address of the affected source;
 - ii. Identification of the operating parameter that is monitored for compliance tracking determination;
 - iii. The relevant emission limitation for the affected source, and the operating parameter value, or range of operating parameter values, that correspond to compliance with this emission limitation;
 - iv. The beginning and ending dates of the reporting period;
 - v. A description of the type of process performed in the affected source;
 - vi. The total operating time of the affected source during the reporting period;
 - vii. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes and unknown causes;
 - viii A certification by a responsible official, that the work practice standards in 63.342(f) were followed in accordance with the operation and maintenance plan for the source;
 - ix If the operation and maintenance plan was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;
 - x A description of any changes in monitoring, processes, or controls since the last reporting period;

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (continued)**

- xi The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
 - xii The date of the report.
- 7. Specific Control Equipment Operating Conditions:**
- a) The source shall operate the composite mesh pad in good operating condition during all times of operation.
 - b) See Section E and 40 CFR 63.343 (c)(1)(ii).

SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and re-issuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit
[Material incorporated by reference by 401 KAR 52:040, Section 1a, 11].
4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, re-issuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5].
5. This permit does not convey property rights or exclusive privileges [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].
7. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
8. All previously issued permits to this source at this location are hereby null and void.

SECTION C - GENERAL CONDITIONS (continued)**B. Recordkeeping Requirements**

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f)].
2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

C. Reporting Requirements

1. a. In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1. a. above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
3. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced

SECTION C - GENERAL CONDITIONS (continued)

operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

D. Inspections

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
 - b. To access and copy any records required by the permit.
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

E. Emergencies/Enforcement Provisions

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

SECTION C - GENERAL CONDITIONS (continued)

d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when

emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

F. Compliance

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
 - a. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
 - b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and none routine maintenance performed on each control device.
 - c. A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division [401 KAR 50:055, Section 2].
2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and

SECTION C - GENERAL CONDITIONS (continued)

- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality	Division for Air Quality
Owensboro Regional Office	Central Files
3032 Alvey Park Drive W. Suite 700	803 Schenkel Lane
Owensboro, KY 42303-2191	Frankfort, KY 40601-1403
3. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
- (a) Applicable requirements that are included and specifically identified in this permit; or
 - (b) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].
4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of 401 KAR 52:040, Section 12(4)(b). Until compliance is demonstrated, the source may only operate for the purpose of demonstrating compliance.

SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Sand Blasting	401 KAR 63:010
2. Comfort Heating	None
3. Aerosol Spray Paint	401 KAR 63:010
4. Two (2) Parts Washers	None
5. Two (2) Rinse Tanks	None
6. Caustic Tank	None
7. Two (2) Welding Stations	401 KAR 63:010
8. Two (2) Cutting Torches	401 KAR 63:010